

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: joelutz@juno.com (Joseph W Lutz)
Subject: 51J-4 Manual Request
Message-ID: <19960906.013230.2870.5.JOELUTZ@juno.com>

I want to thank the group for the multitude of replies for my request for a 51J-4 manual. I should have one waiting for me when I get back from a trip to Arizona. If only I could get the same response for a Johnson Adventurer <G>, I will be putting things on the list when I get back, as I can see a 'faint' light at the end to the tunnels with an end to opening boxes (and finding places to put things). The box of (6) 4CX1500B's made it fine, along with more stuff than I know where to put it! Anyway, we all have that problem - but that's what makes it so enjoyable. Thanks again for all the responses.

73 de Joe W7LPF/4
QWCA - SOWP - NCVA
email: joelutz@juno.com
Gordonsville, Va 22942 (Orange County)

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: wj5j@juno.com (John D Hensley)
Subject: 51J4 Parts Needed for Collins Serial number 106
Message-ID: <19960905.205140.7863.6.wj5j@juno.com>

Hello Group,

My last post was apparently unclear, so I am going to try once more by spelling out exactly what I want to buy, trade for, borrow, etc. etc. for the 51J4 I am working on. (Yes, I'm getting ready to work on my R390's too ! but the 51J4 has been on the bench and needs to be attended to first. When I get BBC on the air via the J4 and its happy, then I'll bring the first of the EAC units over and tackle it).

Here is a list of exactly what I need to bring my 51J4 close to the bench checking stage. If you know of a source (e.g. say for the xtals), please let me know.

(Now don't laugh at me...wave your fist at the maniac who butchered this radio and was deluded into thinking he was accomplishing something...)

Major Chasis Parts Needed:

Manual
All small knobs

Mechanical Filters

Left chassis side panel (facing radio, the left side panel),
Mine has rust. Does anyone have a clean unruined
panel?

Bandspread drum & gear drive or cord drive attachment,
however it was done.

Khz dial, gear
and whatever was used to connect it to the front gear
train.

Top and bottom covers

Chassis underbody parts needed:

all bandswitched xtals. Can anyone tell me what the
xtal type and frequencies are?j These I probably
can order but would like to trade for.

Xtal area cover.

antenna trim shaft; runs from front panel all the way
back, via a bushing probably, to a coupling on the
ant trim capacitor

speaker switch or jack or what was it occupying the
"Speaker" position at bottom of front panel next
to headphone jack?

CAL shaft, coupling; located again at bottom of front panel
one each 4.0, 8.0, and 16.0 IF coils and slugs

Top of Chassis parts needed:

Meter

Whatever went into the meter input/output hole left of
the meter.

Whatever went into the hole above the word meter
which is immediately above the other hole.

BFO pitch shaft, rear bushing & gear, and gear
which went on BFO module shaft that it connects to.

Xtal Filter selector switch and control.

Phasing & selectivity shafts, couplings, and ???

Y-111 large X-tal center of the chassis

Plug in product detector (or article showing construction
of same) which looks like it went in a recessed octal
socket next to the 5V4G.

Tube Shields to fit 12AX7 (2), 6BA6 (8), 6A2 (1-open frame)
6BE6 (4), and 6AK5 (1) [here's a use for your tube shields Ben]

*****end of list *****

Please contact me by private post and be up front with what you

require for what you can spare. I will send before and after pictures to all who help, reimburse all mailing costs. Since asking for this many parts will be like pulling teeth, I will make any of the following available (less shipping) for trade towards the right group of parts:

Hammarlund HQ-140x
National HRO-M, 5 coils
National HRO-M-R, about 5 or 6 coils
Multi Eimac A54H
Hallicrafters SX-25
Hallicrafters SP-44 panadaptor
Hallicrafters PM-10 Speaker
Heath HR-10b
Scott RCH ships entertainment w/ orig case
BC625A VHF xmtr, parts unit, mostly complete (I think)
BC221A Freq Meter

73,

Doug WJ5J

***** WJ5J / NNN0BXX *****
WTF: Johnson Ranger 1; model 28 typing reperferator; 800 hz
filter for 75A3; T2 modulation xmfr for Viking Valiant; KS1 p.s. for
KL1 amp; National rack mount speaker, XCAL & NBFM modules
***** wj5j @ juno.com *****

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: knudsen@gvmail.ih.lucent.com
Subject: Re: 6360 Tube Wanted
Message-ID: <9609061607.AA09420@bock.ih.lucent.com>

FWIW, this is also the tube used in the Kleronomous (sp?) mod
to the R390A local audio output. So there should be a few around...
73, mike k aa9rg

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: tomrice@netcom.com (Tom R. Rice)
Subject: AN/APS-20 Test Meter I.D. Sought
Message-ID: <199609060231.TAA29166@netcom21.netcom.com>

My junque shop foray yielded a neat little test meter
about 3 1/2 inches wide by 5 1/4 inches high and 2 inches

deep. Bakelite box with 2 1/2 inch Marion meter and hefty pushbutton on the front. A long cloth-covered cord extends out the bottom end of the box and is terminated in a PL-47 (standard W.E. tip-sleeve plug).

Label on top end reads:

60058
for
ARJ ARK ATJ ATK
or AN/APS-20

N383s-27590 Ser. No. 25

It's apparently intended to plug into these rigs and read currents of 0-15 mA and 0-150 mA while tuning up.

If anyone can shed some light on these units, I'd like to know. The meter looks just fine for use in the shack for tune-ups.

tnx de WB6BYH

--

"Start off every day with a smile and get it over with." --W.C.Fields
Tom R. Rice
tomrice@netcom.com
CIS: 71160,1122

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: "Ray L. Mote" <rmote@rain.org>
Subject: Apology (re: "BA party" post)
Message-ID: <Pine.SUN.3.94.960906094803.16881A-100000@coyote.rain.org>

Definitely off-topic & inappropriate. I was way out of line. Sorry.
Please don't post in response to it.
73.....Ray Mote, K5FKT

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: "Ray L. Mote" <rmote@rain.org>
Subject: Re: BA Party
Message-ID: <Pine.SUN.3.94.960905230511.18600D-100000@coyote.rain.org>

Yes, I'm all for it. Not sure who we'd put up for President & V.P.,

though. But I'd sure like a crack at developing planks for the platform. ;^)

(The Devil made me do it. <grin>)
73.....Ray Mote, K5FKT

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: Joe Serocki <JSEROCKI@allstate.com>
Subject: BA Tube Exchange -Reply
Message-ID: <s22fd8e3.022@allstate.com>

I have recently purchased 1500 tubes, and am in the process of acquiring more, and will make an Access (or delimited) database available (as soon as I can get the kids to type it in)...

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: BC375@aol.com
Subject: Bendix TA-3
Message-ID: <960906071652_195572683@emout19.mail.aol.com>

Dear Friends:

Does anybody have a manual for loan to copy or other such information for me to borrow regarding the Bendix TA-3 transmitter? Copying charges gladly covered. Is anybody familiar with this transmitter? It is four times the size of the TA-12 and has nothing in common in terms of operation with it. It uses the MP-10 PS also supplied by Bendix. Has anyone seen of this supply or know of one for sale? Thanks. Charlie KA1GON

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: jcreid@CCGATE.HAC.COM
Subject: Bon Ami
Message-ID: <9608068420.AA842033599@CCGATE.HAC.COM>

Gang,

I've been giving a lot of thought to the process of cleaning these small rust pits off the front panel of my newly acquired SX-42. I remember reading in some past automobile helpful hint guide about a trick and wanted to get any input to see if this would be feasible.

The initial problem was radio noise caused by the wiper blades passing over the "antenna in the windshield" on GM cars built in the early 70's. Apparently there was some kind of static noise generated by the rubber blades rubbing over the invisible grunge on the windshield. The cure was to use Bon Ami cleanser and "polish" the windshield. As I recall, Bon Ami uses a different kind of grit than do the regular cleansers such as Comet, Ajax, etc. and is much gentler than the others. Their trademark has always been, "Hasn't scratched yet...".

Now I realize that glass is much harder than paint, but has anyone tried or thought about trying to use Bon Ami to clean up a front panel? Maybe it's safer to try it on a chassis first or some clunker before ruining an old radio. I welcome any comments. I may try some this weekend. I report back on the results.

-Jim N6SVS
jcreid@ccgate.hac.com
Gardena, CA

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: "Allan Fritsche" <fritsche@msn.com>
Subject: DAY 2 - Saga of the Valiant
Message-ID: <UPMAIL03.199609062136140706@msn.com>

Well Gang, 2nd day of troubleshooting. BTW, thanks to all who responded with tips, got them all saved and will use. As again, whomever who helps get this fixed will receive a BEAUTIFUL Certificate of Merit , done in Powerpoint, suitable for lining your bird cage. COLOR no less.

Now to be serious, Spent about half a day doing resistance checks of the HI and Low Voltage transformers. On the Primary sides had to get out the OLD Penske Auto Analyzer. It's got a 0 to 50 Ohm scale that looks like the front panel of a SX-101A. Miles and miles of Low ohms. Everything measured to spec with the manual. BTW(the manual is pretty good for this). This is a factory wired job, so that consoles us a little.

Again checked the 866A HV rectifiers in my little KnightKit 600Testur. Held the Value switch down for at least 5 minutes on each and they glowed blue and pegged the good side. Ran resistance checks from all the tubes that are involved with the HI Voltage Side. Everything is O.K. Checked on the Primaries for shorts to grnd, etc, etc, etc. Shit(Damn I never cuss) am overlooking something. Do you guys think it could be one of the (3) 6146) finals, I just realized that I can take one of the 2 in the modulator stage and sub. Will do next, among other things. Next question that will turn up is insulation breakdown, I feel.

Question Next is , since I have bought out all the 8 Amp fuses in Texas, does anyone now of a 8 AMP Circuit Breaker. (I know 10 will work). To spare me the expense.

Question Next is: The RED Final (on bulb is wide ass open.) It's across the primary of the HV transformer. I think its a 6S6 117 V screw type. GOD, does anyone have an idea on where I can obtain, WAIT does this have anything to do with the 8 amp guys blowing, in rush currents, etc.--- Just dreaming as I know better.Has to be in series.

Any ideas are Very welcome.
Your Friend Al
fritsche@msn.com

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: Michael Crestohl <mc@shore.net>
Subject: EARLY RADAR ENTHUSIASTS: John Roberts' estate book & manual list!
Message-ID: <199609061138.HAA11645@northshore.shore.net>

Hello Everyone:

As many of you know some friends and I have been helping to find new homes for John's stuff he collected in his lifetime. He had a HUGE library of military TMs going back to the 1930s! We have finally finished the

list of radar and IFF manuals. This is the first of several lists of books from his collection.

This list is approx 900 lines long! Rather than posting it to the list I have uploaded it to the BA Archives where it resides as radarbooks.gz and it may be freely downloaded. If you do not have download capabilities I can send it to you as a ZIP file in uuencoded format as a piece of e-mail.

I am giving the Boatanchors List members the first "shot" at this collection as I feel that you are my friends and we want these manuals that John collected to go to folks that will appreciate them and keep them for future enthusiasts. The average price of a manual is \$5.00 although some of the earlier and larger ones are a bit more.

73, and hope the wx will be better for Gaithersburg!!! We plan on leaving very early tomorrow morning!

Michael Crestohl, KH6KD/W1
mc@shore.net

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: "Paul Bock" <pauboc@smtplink.pulse.com>
Subject: FS or trade: Vibroplex Presentation
Message-ID: <9608068420.AA842026668@smtplink.pulse.com>

FOR SALE OR TRADE: Please e-mail or call if interested.

Vibroplex 1962 "Presentation" serial #227934

Description: Chrome base & top parts, gold base top. Very good condition overall, top parts EC/near mint. Some wear & scratches on gold base top, light scratches on sides of chrome base. New jeweled bearings. Absolutely no rust, corrosion or pitting anywhere (other than scratches previously described). Red knob & thumbpiece both VGC, no cracks or chips. Missing the circuit-closing switch assembly; chrome screw & washer plugging the hole.

** BEST CASH OR TRADE OFFER **

Paul Bock, K4MSG pauboc@pulse.com

work: (703) 471-2900 x4536
home: (540) 882-4745

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: MEC <danmec@inet.uni-c.dk>
Subject: FS: BC 322
Message-ID: <Pine.3.89.9609061243.A884-0100000@inet.uni-c.dk>

Walking through my basement, I found a piece of US equipment I har
forgotten all about.
It is a transceiver , BC 322, probably for ground-to-air or shore-to-ship
communication. In excellent condition. No aerial. With handset.

Any offers ? Located in Copenhagen. Freight costs approx 50 dlrs to USA.

73 Rag

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: Don Reaves <dr@cei.net>
Subject: FS: HQ-129X
Message-ID: <Pine.LNX.3.91.960906012502.18386A-1000000@kc5jh.reaves.net>

Need more room ---

HQ-129X, re-capped, working. Needs cleaning and IF alignment. Front
panel paint is worn around the bandswitch, bandspread and audio
gain controls. (Somebody *used* this radio). Original knobs, original
manual, original cabinet. Some new tubes. Cabinet needs painting.
\$100 + shipping for about 40lbs. Goes to a local hamfest Saturday.

Don Reaves WA5BBS dr@cei.net
46 Arbor Oaks Drive
N. Little Rock, AR 72120

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: Don Reaves <dr@cei.net>
Subject: FS: Parts
Message-ID: <Pine.LNX.3.91.960906024804.18441A-1000000@kc5jh.reaves.net>

Need more room... Cleaning out the boneyard here.

This hollow state stuff is nearly free. You pay shipping. Good for
parts: power transformers, electrolytics, tube sockets, resistors, etc.
or build your own small scale reactor control station. :-)

Shipping weights are estimated.

\$5.00 each for the following. Swaps entertained.

Nuclear Corp of America Scaler Model BC-594. Nice analog panel meter. 25 lbs.
Nuclear Chicago Scaler Model 151A. Smaller panel meter. 25 lbs.
Conrac CNB-8 portable (?, well, it has a handle) monochrome monitor. 45 lbs.
Remnant from an electronics training aid. Has about 30 high quality panel
mount banana jacks for someone who has the patience to remove them. 5 lbs.
Heathkit ID-22 switch. 5 lbs.
Ballantine RMS voltmeter. Model unknown, no cabinet. 15 lbs.

Wanted: Cannon mike plugs, tube sockets for 250TH and 304TL,
junkier SX-111 (glass dial intact), antenna tuner components,
transmitting micas, TR switches.

Don Reaves WA5BBS dr@cei.net
46 Arbor Oaks Drive
N. Little Rock, AR 72120

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: Dale Braun <dale.k.braun@uwrf.edu>
Subject: Fundamental Amplifier Question
Message-ID: <s2303709.085@adngate.adn.uwrf.edu>

I am currently running a homebrew linear amplifier using two triode-connected 813's in grounded grid, class B. From articles I have read, typical full input current readings for class B operation would be 400 mills on the plate and 100 mills on the grid. So what happens if I am able to get maximum output with less grid current? Does that translate into operating under some other class of operation or necessarily add distortion to my signal?

Currently I am using two different tune up methods. One is to keep advancing drive until I get the suggested grid and plate current readings. The other is to advance the drive to about 60 mills grid current and tune the output matching network for maximum output. On my amp on 80 meters, that's at about 60 watts of drive, with meter readings of 70 mills grid and about 380 mills plate. Yes, I have verified that my meters are reading accurately. I am running 2100 volts on the plate key down. Grids are operated zero bias, resulting in a resting plate current of about 40 mills. Power output at this point is 550 watts. I could advance the drive to get the recommended 100 mills grid current but it doesn't yeild any more output.

So, back to my original question. What's the proper way to set up the amplifier?

73,
Dale
WD9GWH

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: w5tvw1@juno.com (Elliot "Sandy" V Blaize, Jr.)
Subject: Re: Fundamental Amplifier Question
Message-ID: <19960906.155525.9423.0.w5tvw1@juno.com>

Dale,

There is REALLY only one really accurate way to set up the tuning on a Linear amplifier....Use a two-tone test oscillator to drive the exciter and a monitor oscilloscope on the amplifier output. Preferably displaying the "Trapezoid" pattern. Then it's check the exciter (especially if it's tunable!) for proper linearity and two-tone levels, then the exciter/amplifier together. Tune the Amp for maximum pattern amplitude while adjusting loading for a "triangular" (no distortion/flat-topping) pattern until you get maximum power concurrently with no distortion. It is VERY difficult to tell exactly what is going on just by meter readings alone! Yes, you can "get in the ball park" but to truly get the most out of your amplifier without any distortion or "splatter", you need something like a Heathkit HO-10 or SB-610 or the equivalent Kenwood or Yaesu units.

When I was in the Marine electronics business setting up SSB transceivers for small craft (pleasurecraft or tow boats) that used fixed preset channels. The radios thusly tuned would consistantly "out-talk" similar sets tuned up using a carrier only.

I have aquired a great respect for this method of tuning "linear" tube amplifiers. It is accurate, easy, fast and you can tell immediately what is going on.

73

E. V. Sandy Blaize, W5TVW

Boat Anchors collected, restored, modified, traded and used!

w5tvw@juno.com -or- ebjr@worldnet.att.net

417 Ridgewood Drive, Metairie, LA., 70001

Looking for 860 tetrodes and a Hallicrafters SR-75

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: Lrware@aol.com
Subject: FWD: TV2C/U tube tester for sale
Message-ID: <960905223052_472731904@emout08.mail.aol.com>

FYI: forwarded from rec.radio.shortwave newsgroup.
e-mail him NOT ME!

-Larry

Subject: FS: Tube Tester
From: asiv (asiv@earthlink.net)
Date: Thu, 05 Sep 1996 21:08:19 GMT

Tube tester, Electron Tube model TV2C/U, in near dead mint condition, everything intact (including wheel). If you are near Nashville, I can deliver it, or otherwise you pay shipping, etc.

They don't even come close to making them like this anymore...

Best serious offer....please respond before 9/7

asiv@earthlink.net

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: RWAYNE@CTC.Net
Subject: Gaithersburg Hamfest Weather
Message-ID: <01I95NG9DIG2903XS7@InfoAve.Net>

What is the weather forecast for the Gaithersburg area on Sunday?

I am planning to bring a BA or two from NC if the wx forecast is favorable.

Thanks,

Richard W4CBG
rwayne@ctc.net

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: JOHN_SEHRING.parti@ecunet.org
Subject: HAMMARLUND HXL-1 AMP
Message-ID: <9609061115.aa19161@pcusa01.ecunet.org>

I've use a Hammarlund HXL-1 for about 10 years.

Its circuit, a pair of 572B's in grounded grid, is basically similar to the Heath SB-200.

Be aware that there were some important circuit changes made w/o any publicity. Original version had an *untuned* input circuit. This can lead to high SWR at input & also possibly distortion. Parasitic suppressors in plate ct also changed.

I've had no serious problems with mine which is the later version. It works most happily off of 220 volts.

Only problem is my use of unmatched (different brand) tubes. They aren't balanced. There is no provision for balancing them. One tube draws lots more plate current than the other. How do I know? Its plate runs bright red very quickly even at normal plate current!

Anyone know of any fix for this?

I also found what happens when a string of HV caps don't have equal capacitance. Ct uses six 100 uF / 450 v series caps with 470K / 1 w equalizing resistor across each. HV is about 2 kV.

The individual cap's with the *lowest* capacitance see the *highest* voltage in the string. One cap had well over 500 volts on it despite the equalizing R's, n.g. for 450 v rating!

Simple fix: Add more capacitance across caps with excessive voltage across them till voltages are more equalized.

I can hardly thing of any other BA that would more likely need a long period of time on low line voltage to reform the HV caps.

And no, fortunately, I didn't find any pencil marks in the HV area on mine! Where exactly was it?

I'd love to get this amp onto 160 m.

-John Sehring (09/05/96 10:04 am MT @Baker, Montana) UCC wb2eqg

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: jproc@worldlinx.com
Subject: RE: HAMMARLUND HXL-1 AMP
Message-ID: <Chameleon.4.01.2.960906133243.jproc@>

John,

If you say that the finals are different brands, that could be contributing to your problem. Here are two potential solutions:

1) If possible, locate another tube of either existing brand and try that. It might help to equalize the plate currents. Perhaps you can borrow one from somebody. If this doesn't help, try step #2.

2) I assume that your plate current meter is monitoring the output of both tubes collectively. You may want to monitor plate currents individually by modifying the meter circuit to monitor the first tube, then installing an external meter to monitor the second tube. When resonating the final, find some point at which the currents are nearly equal. The Marconi PV500 uses this scheme. There are two plate meters to monitor the plate currents of the 810 output tubes. The manual states that the currents will never be the same, so adjust the final for a compromise situation.

Does the Hammarlund manual specify matched tubes in the final?

Regards,

Jerry Proc VE3FAB
E-mail: jproc@worldlinux.com
HMCS Haida Naval Museum
Toronto, Ontario
'Looking for a 'AN/SRC-501'

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: Bob Duckworth <rmd@ka4ybr.netmha.com>
Subject: Hammie HX500 TX factory mods flyer.
Message-ID: <199609062123.RAA12063@ka4ybr.netmha.com>

I picked an HX-500 in trade today and along with it came a service bulletin.

- 1) PTT mod.
- 2) Phone patch input mod.
- 3) General operation note. "Do not snap the transmitter on and off (standby to off) rapidly, failure to observe ... may result in blowing fuses, possibly arcing in the high voltage rectifier and damage to the 6a46's". Says to ee 6146 bias mod notes and that continued fuuse blowing could result from bad 6A15 bias rectifier.
- 4) ALC mod
- 5) Audio distortion reduction mod.
- 6) Intermittant of dead Xtal fix.
- 7) Hash during RX fix.
- 8) Low SSB but O.K AM means bad 6EW6
- 9) CW chirp fix

- 10) CW VOX mod.
- 11) FM of carrier by fan fix
- 12) Improved AM mod (this is screen mod AM and pretty cheesy anyway)
- 13) FM on AM fix is same as chirp fix
- 14) Vox anti-trip fix.
- 15) 6146 bias mod
- 16) 60kc IF bleed fix mod.
- 17) 3950 spur fix mod.

If anyone needs this I'm in the process of scanning in my manuals and will be able to send a PCX or possibly other format copy.

Wouldn't you know it, none of these mods have been done to the unit I got :-)

-bob
WB4MNF

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: MODSTEPH@ACS.EKU.EDU
Subject: Harvey-Wells Owners list
Message-ID: <01I95P3RQ6GQ002CAE@ACS.EKU.EDU>

...I mean, why not? Everyone else seems to be doing it... ;)

73, Al N5AIT

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: Joe Serocki <JSEROCKI@allstate.com>
Subject: HELP: Tube storage ideas needed
Message-ID: <s22fd95c.024@allstate.com>

I have a bunch of loose tubes. Any ideas on how to store them in an organized, accessible fashion? Some sort of carton, or ???

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: John Shriver <jas@shiva.com>
Subject: Re: HELP: Tube storage ideas needed
Message-ID: <199609061413.KAA25690@shiva-dev.shiva.com>

>From Antique Electronic Supply, buy tube eggcrates, or white boxes.

If you use white boxes, a great way to store them is as follows:

1. get three of the cardboard trays that go under 24 soda cans
2. get one photocopier paper box (eg. Xerox)
3. put the tube boxes in the trays
4. stack the trays in the box

I can't take credit for this, a local tube broker is where I learned it. I use this for all sorts of storage now.

It helps if you have lots of those nice sleeves for holding 5 tubes. I have only a few, so I also cut divider strips, at least for the miniature tubes.

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: "L. Mark Pilant - MS:ZK03-4/Y02 DTN:381-1529" <pilant@seesaw.ENET.dec.com>
Subject: RE: HELP: Tube storage ideas needed
Message-ID: <9609061501.AA17796@us2rmc.zko.dec.com>

Well, being as avid woodworker as well as firebottler :-) I'm doing the following:

- 1) Buying assorted plain white boxes from Antique Electronic Supply to protect the tubes.
- 2) Build my own tube "caddy" from pine boards and 1/8" hardboard. Although it will be more like a wood egg crate than a traditional tube caddy.

What I want is a pine frame, about 8" (or 10") x 20" (or 24"), with a single divider on the long axis and multiple dividers on the short axis. I expect each compartment will hold four tubes. I'll probably make some of the compartments big enough to hold my larger octal based tubes. (The majority of my tubes, about 100 total, are 7 and 9 pin miniatures.) I also want it to have a lid. Although I haven't decided whether to make it a slide in version or a hinged version.

If anyone is interested in making something like it, I'd be happy to lay out the plans when I get it together.

73

- Mark N1VQW

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: k7yha@juno.com (Richard H. Arland)
Subject: HQ-170AC - Latest Scoop
Message-ID: <19960906.020407.4439.2.k7yha@juno.com>

Gang:

I'm learning a LOT about BA receivers I either forgot or never knew.

On the advice of several of you who suggested swapping out the 6C4, I did that with a known good tube and BOY, what a difference! 20, 15 & 6 came alive!

Pulled RF alignment on 6, 10, 15, 20 & 40 meters today with excellent results. Linearity is good end-to-end on each band (except 6....that's to be expected with a 4 MC spread).

My only concern now is the apparent lack of sensitivity on 40 and 80 meters. All other bands (cept 6) exhibit MDS down around -90 to 94 dBm. 40 & 80 meters only go down to 78 dBm. I think there might be something wrong. In addition, when doing the 80 meter alignment (not finished with it yet) I noticed a steady build up of noise. Gently thumping around on the underside of the chassis in the area of the RF wafers on the band switch yields a source of noise. Looks like maybe a cold solder joint or two. This may also account for the lack of sensitivity on these two bands.

Will hopefully complete the RF alignment tomorrow and spot the cold joint and repair same. Hey, this is starting to be FUN!

73 es tnx to all who have responded with suggestions and ideas.

rich K7YHA

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: knudsen@gvmail.ih.lucent.com
Subject: HRO-60 Troubles
Message-ID: <9609062024.AA09937@bock.ih.lucent.com>

Most of the stuff I picked up at Elgin IL has worked pretty well. Even the battered HRO-60 gave it a good try. I can copy BC stations with a 3' antenna, but some problems include:

(1) The "B+ ON/OFF" switch has no effect, either on reception or

in preventing a big ZAP if I pull or insert a coil with the AC on. Most of the coil boxes have a burn mark in the same place (2nd RF amp). My guess is the B+ switch is to be turned OFF while swapping coils, and some budding MIT graduate wired the switch out of the circuit -- can anyone imagine why? Maybe to use the switch for some other "user-installed" option?

I guess the answer will become clear when I tear into the set...

(2) A steady self-oscillation in the IF, maybe the 1st stage. I can zero-beat it with the nice working BFO, and it makes a decent BFO itself :-), but it is not very strong. I always thought a self-oscillation was either full-blast or not at all. Oh well...

(3) Not a lot of sensitivity, in fact nothing much above 160m. Maybe (2) is pushing up the AVC and de-sensing the set.

(4) Selectivity control has little effect, nor does Phasing -- seems the xtal filter is really shot. Default AM BW is pretty nice with all those double-tuned IFs.

SOME OBSERVATIONS:

Tone control, when clicked fully counter-clockwise, seems to give a good narrow "comm" response. Beyond that, it works like a traditional consumer treble-cut tone control, only backwards. Pretty nice.

Previous owner is to be commended for nice homebrew SSB adapter in the NBFM slot, and also for how he added an SO-239 jack without cutting any metal -- put it in a standoff bracket mounted with existing chassis screws, short wire to the ANT terminal -- 100% reversible.

HR0-60 is the last and supposedly the best of the Nationals. Front end architecture is identical to the SP-600: 2x6BA6 RF, 6BE6 mix, 6C4 (ugh) hfo, 6BE6 2nd converter, etc. Maybe a 6CB6 in place of 1st 6BE6 would help even more. Maybe the last Ham RX made with P-P audio?

SOME PLEAS FOR HELP:

I got only a zerox of the SAMS pages with it, which is OK for troubleshooting, but... Anyone want to copy the National manual for me, maybe in trade for similar copy of any of several radios?

I need the lower BC coil (500-950?), 6m coil, and dial strips for the coils below 80m. I can trade some ham-only dial strips, including AC (15m). Tnx es 74, mike k aa9rg

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: MODSTEPH@ACS.EKU.EDU
Subject: Last laugh - knobs revisited...
Message-ID: <01I94VMD96K80020TW@ACS.EKU.EDU>

A week or so ago someone had a post about removing stuck knobs. I got a chuckle over it, having never had that problem.....

Then I started to remove the knobs from the AF-68 so I could polish the plastic dial cover... Got all off except two. The set screw came all the way out of one of them, but it remains firmly stuck on the shaft. Tried twisting/"unscrewing" it; no go. Usual WD-40, Liquid Wrench, nothing. Guess that one stays on.

More frustrating is the one with the stuck set screw, since it is the last thing holding the plastic cover in place. Liquid wrench, WD-40; it remains stuck. I have been considering a nutcracker..... ;)

Will do what I can to clean up the plastic around the %^&%*&^\$&^ thing, I guess. The xmtr needs to be on the air, not just sitting soaking up the solvents...

73, Al N5AIT
modsteph@acs.eku.edu
Richmond, Kentucky

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: k9gdt@juno.com (George P Sieverson)
Subject: Looking for a mate....
Message-ID: <19960905.210345.3662.3.K9GDT@juno.com>

Now that I have your attention.....

Greetings fellow thermionic emissives:

Well, my Collins 75A-4 restoration is complete. Here's what was needed to bring the old girl up to snuff:

Replace faded S-meter face. (Thank you, Hap!)
Replace funky 3.1KC filter. The original had about 15db insertion loss.
Replace about a dozen or so funky postage stamp mica capacitors.
Fortunately, a previous owner had replaced the large value rolled foil caps.
Obtain suitable 6KC AM filter. (Thank you, Eric!)
Repair drifty PT0.

Restore the engraved lettering between the two frequency readout windows.
Restore the engraved "tick marks" below the kilocycles window.
Replace a funky resistor in bias supply.
Restore luster to faded knobs and cabinet.
Clean up chassis. (I should have purchased stock in Q-Tip Corp.)

I wish there were something I could do about the yellowed dial drum and a few minor paint scratches on the top of the case. I'm dangerous with paint, so I'll live with the scratches! Still, she looks great!

After restoration, I developed a modification which eliminates the obnoxious AVC thumping when listening to a CW or SSB station. If you have an A4 and listen with a large speaker, you probably know what I'm talking about!

Purists take note: I have implemented the changes to my 75A-4 in a manner which allows the receiver to be restored without any evidence of the modifications. I will never remove these changes as long as I own the receiver. But who knows? There may be some crazed collector out there willing to pay off my mortgage to get his hands on my 75A-4. Hmmm...I don't think I could part with it. They'll have to pry that 4:1 spinner knob from my cold, dead fingers!

Now the "mate" part of this message: My original intent was to use the A4 with my Ranger. However, I think such a great sounding SSB/CW receiver deserves something better. One item which comes to mind is a KWS-1, which I understand are very expensive. So much for that idea. (Nuts!) Another suitable mate would be a Central Electronics 100V or 200V. Does anybody know how much they sell for? How about availability? Better yet, does anyone have one for sale or trade?

Maybe somebody can suggest another option.

73's es Cheers,
George

George Sieverson
Barrington, IL
K9GDT@JUNO.COM
george.sieverson@hbc.honeywell.com

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: MODSTEPH@ACS.EKU.EDU
Subject: Louisville Hamfest
Message-ID: <01I95P96B9RM002CAE@ACS.EKU.EDU>

...is tomorrow and Sunday, and all indoors at the expositiong center at the fairgrounds (I think - by the stadium south of town, north of the airport).

Will be there - hope to see some of you. Won't have a space, just looking...

73, Al N5AIT
modsteph@acs.eku.edu

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: JOHN_SEHRING.parti@ecunet.org
Subject: MATCHBOXES
Message-ID: <9609061115.aa19176@pcusa01.ecunet.org>

> John, I would recommend the KW Johnson tuner for the receiver input.
> Dxers have always recommended this tuner over the 275 watter because of
> higher Q. (slkst29+@pitt.edu)

Thank you for this info!

However, according to tests of various antenna matchers in QST 5/95, the smaller Matchbox had *less* loss, at least for the kind of antennas loads used in the tests. Hmmm.

-John Sehring (09/05/96 10:41 am MT @Baker, Montana) UCC wb2eqg

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: Steve Ellington <n4lq@iglou.com>
Subject: Re: MATCHBOXES
Message-ID: <Pine.GS0.3.93.960906123837.9677A-100000@iglou1>

>
> However, according to tests of various antenna matchers in QST 5/95, the
> smaller Matchbox had *less* loss, at least for the kind of antennas loads
> used in the tests. Hmmm.

I have been told that the 275w matchbox can easily handle a kw dc. Haven't tested this though.

Steve Ellington N4LQ@IGLOU.COM Louisville, Ky

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: Neal McEwen <nmcewen@metronet.com>
Subject: Re: MATCHBOXES
Message-ID: <199609061735.AA04523@metronet.com>

>
> > John, I would recommend the KW Johnson tuner for the receiver input.
> > Dxers have always recommended this tuner over the 275 watter because of
> > higher Q. (slkst29+@pitt.edu)
>

Higher Q buys you nothing unless you need the out of band rejection as some
contestors and DXers desire. It might even cause you to tune more often!

>
> However, according to tests of various antenna matchers in QST 5/95, the
> smaller Matchbox had *less* loss, at least for the kind of antennas loads
> used in the tests. Hmmm.

Most all of our receivers have enuff gain to compensate for any small loss.
Either of the Johnson tuners will work fine for BA purposes.

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: MODSTEPH@ACS.EKU.EDU
Subject: Re: MATCHBOXES
Message-ID: <01I95W7TEC54002EYM@ACS.EKU.EDU>

I have regularly operated my 275 watt Matchbox with an amplifier that
puts
out a decent 500+ watts (four 811's) - I just make sure I do the
tuning at lower power to begin with...

73, Al N5AIT
modsteph@acs.eku.edu

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: "David L. Thompson" <thompson@mindspring.com>
Subject: Re: Matching tubes, Is it worth it?
Message-ID: <199609060547.BAA22102@itchy.mindspring.com>

Gang,

There has been a lot of discussion about matching tubes and several experts

have told me
recently that at least at RF it is not worth it!

Several big gun Dx/Contesters (with all sorts of amps and tubes) have run matched tubes (generally 3-500Zs or 3CX800's) and then run new tube that were not matched before plugging them in. The result they report is not worth the extra money and effort. At best at 1500 watts out you get maybe 40 or 50 watts more. My classic Henry 2K (ser #156) doesn't care if they are matched or not. The only requirement is that they are both good. A soft 3-400 or 3-500 becomes very evident as the good tube glows orange red and the weak tube has almost no glow. Power output drops 30% as a sign if you can't see the tubes directly.

With regards to BA applications, one Drake line person I know that is active on 160

(he swears by the Drake Line for weak signal work) that even with the the finals for the T4X (6JB6) series that he notices little difference. He and I even compared finals in the Galaxy V (matched versus unmatched) and found in one instance that unmatched were better. We did find that the unmatched required a little neutralization on 10 meters especially using the remote VFO for split operation.

Our common 6146's are extremely rugged as are 807/1625's. If you run 4 tubes then matching starts to help with stability, but even here does little for additional power output. My dad and I built that classic 4-400A amp in the handbooks (1958-1970 or so) and modulated that with a pair of 811A's. Our elmer on the rig W5KHB told us to buy a pair of new 811A's but don't waste money on the then new matching craze. The tubes came from Bill Slep and never missed a beat for 14 years!

I say (at Rf) plug in the tubes and play!

Dave K4JRB

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: Andy Wallace <wallace@mc.com>
Subject: Millen Variarm VFO
Message-ID: <9609062139.AA04778@training1>

----- Begin Included Message -----

From: "Christopher A. Bowne" <radiobwn@q.continuum.net>
Subject: RE: BA parts at AWA meet, Rochester, NY

I have a Millen 90811 Vari-Arm VFO that I promised Bruce Kelly, W2ICE, would be donated to the AWA museum station, for use with the W1HRX James Millen transmitter.

----- End Included Message -----

I was up at the Westford, MA antique radio flea organized by John Terrey (of A.R.C.) and saw one of those, but passed on it based on condition and price.

I'd sure like to hear from someone that uses one with their BA, perhaps even with the 90800 tx or whatever. I also saw the sliderule-dial Millen VFO up at the Contoocook NH flea two years ago and missed it (\$40!) by seconds. A Millen monitor scope went with it, too!

I wonder what National would have been like if the Millen partnership had held until much later.

73,
--Andy
wallace@mc.com

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: Michael Crestohl <mc@shore.net>
Subject: More information on early RADAR books list....
Message-ID: <199609061154.HAA14038@northshore.shore.net>

For those of you who don't have anonymous ftp access you can have the list sent in its uncompressed text form by sending a message to:

listproc@theporch.com

no subject required

get boatanchors radarbooks

and send it. The list will arrive shortly thereafter in your e-mail. Be advised that it is long.....so don't print it out unless you have a LOT of paper in your printer!

Enjoy!

73,

Michael

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: CADV16@aol.com
Subject: Need Wire Wound Resistors
Message-ID: <960906121055_1376971546@emout12.mail.aol.com>

I my quest to restore a Collins 20V-3 AM broadcast transmitter I find that I need two wire wound resistors. They are both 25 watts, the first value is 15k ohms and the second value is 4k ohms. I anyone has these resistors for sale please advise as I would like to buy them! Many thanks, Elliott Klein / KJ7KH e-mail: CADV16@AOL.COM or call (602) 991-0575

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: George Humphrey <gah@topher.net>
Subject: New Ham Station
Message-ID: <199609061736.MAA29229@mail.topher.net>

Hello all BA folks,

I am an older fart (54) and finally getting my start in amateur radio. I am taking the tests tomorrow for the tech, no code and expect to take the general and code in 30 days. At least that is my schedule today.

My problem is that I have no interest in rice burners, and want to set up a station with BAs only, on a tight budget. I am planning on building my own ground plane antenna and want to start working 2 & 6 meter phone and cw to begin with, and move to the 10 - 80 meter next. My real interests are BAs and antennas and I bring about 20 years of communications engineering in the DoD with me in this pursuit. What would you guys recommend for a tx, rx, coupler, power supply, etc.??? I do need to keep costs down, but want to buy equipment I can grow into.

Any suggestions please send to my e-mail gah@topher.net unless you think the list would be interested.

Thanks a lot,

George, TBD call sign?

George Humphrey ****Every day you wake up****

gah@topher.net
Emory, TX, USA

**** is a GREAT DAY ****
**** Be Happy and Smile ****

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: "Ray L. Mote" <rmote@rain.org>
Subject: Old-time surplus dealers: oral history last chance
Message-ID: <Pine.SUN.3.94.960905225651.18600C-1000000@coyote.rain.org>

The period from the end of WW2 to the late Sixties at least was unique in terms of ready availability of surplus military equipment. I don't think anyone has yet been able to accurately determine the total effect of this on the U.S. in terms of its contribution to proficiency of amateurs, generation of interest leading to an electronics profession, etc. (And I doubt they ever will!) With the passing of Bill Slep, I only know of one place still open that is an old-time surplus house: Fair Radio. Phil and George could doubtless spin a lot of interesting tales about the "good old days", and now they seem to be the only ones left who could give us a picture of that time from their unique (dealer) perspective. Is there anyone on BA who lives in the area, is interested in such a project, and would like to try? I suspect that just about everyone on the list would be interested in the results.

By the way, Bill Slep was still relatively young; Buckmaster's CDR0M of ham data listed his date of birth as 1928, making him no older than 67 at his death.

73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA ex-W6RIC

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: sbrovas@tir.com (sbrovas)
Subject: Partial 117XC Swan spkr supply sale
Message-ID: <199609060225.WAA12370@tir.com>

Hi all,

I have a partial 117xc supply. It is operational. Has speaker, but no cabinet and fused power cord is missing. Was using it with a jumper. It is fully operational and has been used with some Swans. I would like to give it a new home. \$65 shipped UPS.

73's de WA1APX/8, Bill sbrovas@tir.com

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: Larry Keith <KQ4BY@IX.NETCOM.COM>
Subject: Prater's Mill Swapfest?

OK, I know I made a couple of deals to deliver at the Prater's Mill Swapfest, near Dalton, GA, tomorrow. I think it is all on the truck. But, if you are looking for anything, tell me now..

No, I will not haul the Globe King... 8=)

73,

Larry, KQ4BY

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: "Edward J. Zeranski" <ejz@nosc.mil>
Subject: RAO-5 speaker
Message-ID: <2.2.32.19960906215757.00705f64@marlin.nosc.mil>

Back off the road after two weeks! Not a good trip but a friend had some radio stuff to sell of when I got home. So....less space in the garage/wallow. Along with what I bought there was an RAO-5 speaker. Type CJS-49493, serial #180. Manufactured for BU-Ships by Jensen Radio, Wells Gardner & Co. contractors. contract NXsr-38492. Any info on this puppy? It is black crackle with rubber feet, volume control upper left, on/off toggle with escution upper right. Pretty good shape and heavy for its size. I'm not sure if the toggle is stock. I'll use the little beast at home but if an RAO fan needs it for an authentic installation we can swap.

Ed Zeranski ejz@marlin.nosc.mil, work
 ezeran@cris.com home
Wooden Boats, Tube Receivers, Rusty Old Trucks, The Good Stuff!

This is a private opinion or statement and is nobody's fault but mine. No person, employer, or govt. should try to take credit for it!

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: "Allan Fritsche" <fritsche@msn.com>
Subject: Roberta's Postpone
Message-ID: <UPMAIL03.199609062136120403@msn.com>

Guys, before a lot of us go getting nosey and rasing hell, let the listowner respond.

Thanks In Advance ---- thou none of my business
Your Friend Al
fritsche@msn..com

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: JOHN_SEHRING.parti@ecunet.org
Subject: RX INPUT MATCHING & MATCHBOX
Message-ID: <9609061815.aa27816@pcusa01.ecunet.org>

See article on building a copy of a Johnson Matchbox (275 Watt type) in 73 magazine, April 1996 (by yours truly).

-John Sehring (09/06/96 9:51 am MT @Baker, Montana) UCC wb2eqg

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: "Roberta J. Barmore" <rbarmore@indy.net>
Subject: Re: SET BOATANCHORS MAIL POSTPONE
Message-ID: <Pine.SUN.3.91.960906123202.4743A-100000@indy2>

Hi, Gang!

Got this today:
On Wed, 4 Sep 1996 listproc@theporch.com wrote:
> MAIL mode reset to POSTPONE

This may be my last BA-list message for awhile. 'Tis my fault, been buried at work, but quite some time ago I decided that if I ever managed to have this or worse happen, I'd leave for good. Second thoughts now but it needs pondered.

Not sulking, not mad; however, I've been only just barely keeping up with work and home, and not feeling too good about things in general--*you* try working long days in a disaster/construction zone, keeping a big TV rig on the air in the middle of it, for nearly a year and see how it feels! (And all the workers; I'm not much of a people person, not in-person and real-time; don't think fast, don't talk loud enough for

most folks and have very little patience with nitwits. Then there's the dust and mess and commotion...!) Have to cope, as I enjoy regular meals and a roof over my head. Already my hamming time has had to drop to near zero and looks like ba-listing has got to follow.

It has been very fun, even with all our digressions, and I'll be keeping the e-mail account, so if anybdy has any old-gear tech questions or whatever I might be able to answer, don't hesitate to write. There are still some folks with whom I'm in the midst of deals, and those *will* proceed. If I owe anybody money, they'd best write--may have gotten lost in the most recent messes at work and home.

73,
--Bobbi

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: n5off@w5ddl.aara.org
Subject: SP-600 List, Yes!
Message-ID: <458078@w5ddl.aara.org>

I'm all for a SP-600 list.

Now if someone would just sell me a nice one, I could send the data in to Ben.

73 de tom

Want Nice Hammarlund SP-600 or SX-73
Keeper of Collins receiver contract data for BA.
Reply to: n5off@w5ddl.aara.org@usl.edu
Phone 318-989-3430

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: "B. D. Hall" <BDHall@ghgcorp.com>
Subject: SP600.USERS list
Message-ID: <32304CEA.48CB@ghgcorp.com>

Greetings Folks...

In the last few weeks in my e-mail with fellow SP-600 owners, people have been wondering why we don't have some sort of SP-600 database a la the R390.USERS database. Well, so I have decided to start one. Things I hope to accomplish with this list:

- 1) Try to find out the approximate serial numbers when Hammarlund started using disk caps instead of black uglies for each model.

- 2) Get a feel for how many of each variation are out there in BALand.
- 3) Get an idea what the military bought, find out contract numbers, military designations, and any interesting military mods.

Soo000ooo, what I'd like (pretty please with sugar on top!) is for all you SP-600 owners to e-mail me with the following information:

exact model, serial number, capacitor type used (disk caps or black uglies), military designation if any, military contract if any, interesting modifications, and any other general comments you would like to add. For instance, my SP-600 would have the following entry:

SP-600-JX-17, serial number 15718, black ugly caps, not a military unit, appears to have been modified to have an IF output jack. Instead of a dial lock, it has an IF Gain control common to the JX-17 model, this is the now infamous unit that started the cat pee thread a few months ago.

So folks, send your data along to me! Once it reaches critical mass I'll pass it along to the archives.

Thanks and 73,
Ben

--

```
*****
* Benjamin D. Hall, Houston Texas          *
* BDHall@GHGCorp.com BHall@GP802.jsc.nasa.gov *
*****
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From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: JOHN_SEHRING.parti@ecunet.org
Subject: SX-88
Message-ID: <9609061815.aa27820@pcusa01.ecunet.org>

The Halli SX-88 came out at about the same time as Halli S-76, 1954.

The S-76 was what I consider Halli's first *modern* double conversion receiver (yes, I know the SX-71 was already there).

By 'modern', I mean uses miniature tubes in RF, oscillator, mixer & IF stages *and* whose circuit continued to be used to the end of Halli's tube rx era.

This design (1 RF stage, 1650 KHz 1st IF & 50 KHz 2nd IF, selectivity via IF transformer/coupling) was used until the very end of Halli's tube receiver offerings in the late 60's.

This series of rx's was: S-76, SX-96, SX-100, SX-101, SX-101A, SX-115, SX-111, SX-122. You can see large chunks of the original S-76 design in all of them. In particular, compare the first (S-76) to the last (SX-122)--you'll be surprised!

The SX-88 was also double conversion but with two (instead of one) RF stages, different (multiple) 1st IF freqs, three 50 KHz IF stages (instead of one), a wider range of selectivity (250 Hz to 10 KHz vs. 500 Hz to 5 KHz), push-pull 6V6's audio output.

It had one foot in the older school of rx design, e.g. very heavy & large construction, used 2 RF stages, and so-called 'amplified' AGC (this type of AGC ct is actually inferior, IMHO, to circuit in the S-76 & later, as the AGC bandpass is much wider than the actual IF bandpass--it lets off-freq sigs pump the AGC).

Two RF stages are not desirable today with such high levels of RF out there. It is prone to overload for one thing. And it was not needed anyway as image rejection was achieved by the double conversion design.

Proof of this is seen in the S-76 & later performance which did as well with fewer tubes, space & parts. Yes, SX-88 might be called a 'souped up' version of the S-76 et al. The complex construction forced the price of the SX-88 to be very high. So high that it was not a commercial success (that's why there are so few of them).

Now the real question is: Is the SX-88 superior in any significant way (under current band conditions) to say the S-76? Even tho I've not handled an SX-88, I doubt it.

Yes, the wider selectivity is nice but skirt shape in the 10 KHz position is not so hot (6:60 dB shape factor is 2.1). In fact the later Hallis have better selectivity using only one vs. three 50 KHz stages! Yes, the pp audio is nice. (The S-76 and later used all-gear drives (& stainless steel wire on the bandspread linkage) so tuning is really nice & tight on those too.) But what a price & scarcity! (and those dang band-change belts)

Changes from the S-76:

- SX-96: added selectable sideband feature
- SX-100 added IF notch filter, xtal calibrator, adjustable antenna trimmer
- SX-101 ham bands only
- SX-101A added product detector, improved 1st mixer ct and AGC for SSB, deleted 160 m
- SX-111 essentially a mechanically repackaged (smaller, less expensive) SX-101A

SX-115 ham bands only, PT0/xtal oscillator for HF injection, added dual-loop AGC, audio inverse feedback, IF noise clipper (is not a noise blanker)

SX-122 deleted(!) the selectable sideband and IF notch features; different (poorer) AGC ct., general coverage

-John Sehring (09/06/96 9:53 am MT @Baker, Montana) UCC wb2eqg

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: bharris@scs.philips.com (Brian Harris)
Subject: Re: SX-88 Not
Message-ID: <2305e2f0@scs.philips.com>

A call to the business revealed the receiver is an SX-99. It works and apparently is not modified. A price has not been set. Dennis will set the price if you are interested.

Brian Harris WA5UEK

----- Forward Header -----
Subject: Re: SX-88 Not
Author: tomrice@netcom.com (Tom R. Rice) at !SMTP/INTERNET
From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: tomrice@netcom.com (Tom R. Rice)
Subject: SX-88: Heart Attacks Not Warranted (and apology)
Message-ID: <199609060215.TAA27282@netcom21.netcom.com>

Red faced, I have to warn you all that I boo-booed, through not being familiar enough with these "newer" Halli receivers. Referring to Moore, I find that the receiver in question has the twin dials, as in the SX-88, but I the knobs along the bottom are more like the SX-96 thru SX-100 types. It definitely did not have the SX-88 large tuning knobs.

(In my defense, the receiver was sitting on the floor behind the counter, was in some danger of being stepped on by the staff and, my budget being depleted, not of particular interest at this time.)

The best thing to do, I suspect, would be to call Dennis and ask him about it.

Alltronics

2300 Zanker Road
San Jose, CA 95131

vox: 408-943-9773
fax: 408-943-9776
BBS: 408-943-0622
WWW: <http://www.alltronics.com>

Mea culpa; sorry for the cardiac arrest cases!

--

"Start off every day with a smile and get it over with." --W.C.Fields
Tom R. Rice
tomrice@netcom.com
CIS: 71160,1122

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: Bob Duckworth <rmd@ka4ybr.netmha.com>
Subject: SX117 product detector mod query.
Message-ID: <199609062047.QAA11875@ka4ybr.netmha.com>

Picked up an SX117 today in a trade (more on that later).
Previous owner said it had been modified with 5763?
product detector. He said it was quite popular and published
in a couple of magazine articles. Before digging into the thing
and trying to sus out the mod, I thought I'd ask here.
-bob

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: knudsen@gvmail.ih.lucent.com
Subject: Re: SX117 product detector mod query.
Message-ID: <9609062224.AA10006@bock.ih.lucent.com>

Funny -- my SX-117 has some of the smoothest-sounding SSB (and AM too!)
of any radio I've played with. Wonder why anyone would mess with its PD?
Ran out of R390s? :-)) Seriously, I guess anything can be improved,
but the only mod I want on my 117 is more xtals and the LF adapter.
73, mike k aa9rg

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: "Benjamin D. Hall" <bdhall@ghgcorp.com>
Subject: Tube Audio Folks, summary
Message-ID: <322F865C.43D@ghgcorp.com>

Hello everyone. Got many, many responses to my questions about why people dislike the audio-tubers and my 6DJ8 selling policy. I will get around to responding to all the messages this weekend if it kills me, as I was happy to receive every one of them. But, I thought I'd summarize the messages I received.

Ben Hall Letterman's Top Ten Reasons to Dislike Audio-Tubers: :-)

- 1) They just aren't scientific, and sometimes down right silly. They make wild claims about products which defy the laws of physics and are proven false by double blind testing involving their own experts.
- 2) They use tubes in applications where they don't last very long. Such is the case with 6V6's in tube guitar amps, where I am told the tubes only last about one performance.
- 3) We are in competition with them for tubes, so that breeds a competitive dislike for them.
- 4) They are in it for the status of it all, and really don't care about the sound quality as much as the nose-lifting of it all.
- 5) Often, fine firebottle equipment scrapping (like the raping of a Tek scope posted here days ago) is often perpetrated by tube audio types looking for tubes.
- 6) Money reasons, conspicuous consumption, consumption and collection for the status only. Perhaps this is a subset of #4.
- 7) Fear that they will begin to covet power triodes like the 6146, etc...

okay, so it isn't 10, I lied.

Every single post I got in response to my query about my sales policy on 6DJ8's has been positive. I will continue selling to the audio crowd at high prices, and will continue to sell to the BA crowd for low prices. In my mind, subsidizing the sales to BA listmembers with audio-tuber cash doesn't bug me in the least. We live in America folks, you can only charge what people are willing to pay. No one here seems to complain about people charging \$1200 for KWM-2's or other desirable radios, they just say: it isn't worth that so I didn't buy it.

Anyways, the new found money (like \$50 folks, I am not making millions here) has been used to purchase a BC-1031-C panadapter. Audio-tuber money being spent in the BA community. How very poetic!

So what do I think of the audio-tuber crowd after all this input? Well, I'll respond to them same way I do to many other things of this type in life: I kick back, laugh to myself when events warrant, and wish people the best of luck in their endeavours. Some people get enthused over old radios, others it is Vaseline coated nitrogen encased, OFC speaker wire. I don't like Tek scopes being raped either, and I will do my darnedest to prevent such things from happening. I urge everyone who

doesn't like equipment being scrapped like that to buy it up, shelter it, and do as I do to my radios: fix them, use them, love them.

And before Jack drives out to Houston with a baseball bat with my name on it, I am going to say that this is all I am going to say on this subject via the list. Please comment via *EMAIL*.

Thanks, 73, and I'll shut up for at least 12 hours, hah hah hah...
Ben

P.S.: no one offended me, I have a thick skin and love to hear other people's opinions even if they are not in line with my own opinions.
--

From the computer of
Benjamin D. Hall, Houston Texas
BDHall@GHGCorp.com -or- BHall@GP802.JSC.NASA.gov

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: Brien Pepperdine <pepperb@gov.on.ca>
Subject: Tube storage.
Message-ID: <Pine.OSF.3.93.960906124425.29185A-100000@govonca2.gov.on.ca>

OK, for tube storage, here is how to be proactive, soon.

Around Christmas time you will be able to buy, most likely, from Rubbermaid and other manufacturers, an item called

.Christmas Tree Ornament Storage box.
They will be on sale after Xmas, or if things are like last years', the sales will start even before Xmas. And of course, its seems the Xmas stuff starts to be retailed sometime in late fall.
The box, subdivided by dividers and layers, is perfect for fragile Xmas tree stuff, and just as fragile firebottles.

Brien
Toronto

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: bharris@scs.philips.com (Brian Harris)
Subject: Tube/s needed
Message-ID: <23063600@scs.philips.com>

Fellow BoatAnchorites,

To increase the modulation on my Supreme AF-100 transmitter, featured in Electric Radio Feb. 1996, from its current level of 30%, I need to replace the final tube. There are two tubes that will work. They have four pin bases, a small plate pin at the top, a plate that looks a small thread spool and are about the size and shape of the 35T triode.

3D23 - made by Lewis and also United, maybe others.

TB35 - made by Taylor, maybe others.

Fortunately (or maybe not), I know of no other transmitters that use these tubes, so there is not a big demand for them. I anxiously await good news from your collective junque boxes. Thanks for listening.

Brian Harris WA5UEK

From boatanchors@theporch.com Fri Sep 6 17:55:54 1996
From: jjm@ihlpf.att.com
Subject: What does this go to ?????
Message-ID: <199609061531.LAA24812@emsr1.emsr.lucent.com>

Three weeks ago, at the Dupage ARC hamfest (outside Chicago), I picked up a dynamotor, NIB. The box had no markings on it. The plate on the 'motor says DY26R0210F0136 and under that CWO. The dynamotor looks like the type that goes on the back of a Command Set, but it's about 1/3 larger. It has same type of mounting plate as the Command Set type, with the three pin connector on the bottom, but again larger. The gentleman I brought it from had a "pull type" shopping cart full of them that he was pulling around the flea market. One of the other "shoppers" said that the DY number could be deciphered as: 26 volts in, 210 volts out at 136 mills. What equipment does this go to ????????????

John McCarty
n9hrt
jmccarty@lucent.com

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: MEC <danmec@inet.uni-c.dk>
Subject: WTB : 75A3 -75A-1
Message-ID: <Pine.3.89.9609061245.A884-01000000@inet.uni-c.dk>

Anyone out there with some of these old RX's surplus to requirments ?

73 Rag OZ8R0 in Copenhagen

From boatanchors@theporch.com Fri Sep 6 11:05:56 1996
From: Larry Keith <KQ4BY@IX.NETCOM.COM>
Subject: [Fwd: Prater's Mill Swapfest?]
Message-ID: <32300B42.4C70@IX.NETCOM.COM>

X-Mozilla-Status: 0001
Message-ID: <322FF777.AF5@IX.NETCOM.COM>